



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,174	01/18/2002	Thomas E. Shirley	29250/CE08633R	4545
22917	7590	12/13/2005	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			ROMANO, JOHN J	
			ART UNIT	PAPER NUMBER
			2192	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/054,174	Applicant(s) SHIRLEY ET AL.	
	Examiner John J. Romano	Art Unit 2192	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 11 October 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
 b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed ^{response} amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: 1-21.

Claim(s) rejected: _____.

Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached Advisory Action.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____

13. ☐ Other: _____.

ADVISORY ACTION

Remarks

1. Applicants' argument's dated 10/11/2005, responding to the August 9th, 2005 Office Action provided in the rejection of claims 1-21, have been fully considered by the examiner.

2. Applicant's arguments filed 10/11/2005, primarily on pages 5-10, have been fully considered but they are not persuasive. . For example,

(A) In regard to Applicant's arguments with respect to Nilsson (Page 5, Second and Third paragraphs), that "...Nilsson nor the admitted prior art discuss how the third set of instructions is updated across all devices in both subsets with the versions of software with each software replacement", which examiner respectfully disagrees.

Nilsson discloses:

"The system of the present invention uses trading as a means to access the software through an interface via the linked procedure call. In loadtime, all interfaces accessible to the linked procedure call are published to a trader function in the kernel. Every interface is published with its identity and an address which refers to a method that creates an object from the interface. The binding between the software versions is made in run-time and every time an object is created for a specific interface, a request is directed to the trader or the address of the create method which is then called and returns an object pointer to the created object.", *emphasis added*, (E.g., see Figure 5 & Column 13, lines 45 - 56), wherein every time an object is created (or installed) for a specific interface (third set of instructions included in each kernel) an object pointer is

published (updated) through the interface, wherein it is old and well known in the art that a procedure call may call an object on a different processor or computer or in other words a remote object. Therefore, a procedure call which access' the correct version of software via trading through an interface, updated by publishing all interfaces to a trader function in the kernel would update across all devices in both subsets with the versions of software with each software replacement. The Trader would direct the request to the appropriate version (address) via the interface. Thus, *Nilsson* discloses the aforementioned limitation.

Accordingly, the response as addressed above is applied to the current argument as all interfaces accessible to the linked procedure call are published to a trader function in the kernel, where each kernel has a trader function or third set of instructions which comprises an updated interface via the updated pointer to the created or upgraded object, which may be in a de-centralized arrangement (see figure 11), wherein (Column 19, lines 36-54), distributed objects and communications among different processors (de-centralized arrangement) is disclosed, wherein computer to computer communication addresses de-centralized arrangements clearly illustrated by Figure 9 and 11 and associated text with client and server code 164 and protocol policy 195 along with the interface specifications 161.

In regard to Applicant's arguments with respect to *Nilsson* (Page 5, Third paragraph), that "Nilsson and the admitted prior art also do not disclose that each version of the third set of instructions that is used by each device in the de-centralized arrangement is to be updated.", the examiner respectfully disagrees. *Nilsson* discloses

trading as taught above, wherein each version of the third set of instructions that is used by each device would access the trader, wherein every time an object is created the trader directs the request to the appropriate address via a pointer. *Nilsson* further discloses:

“Referring next to Fig. 5, there is shown a table 120 containing a Call Identification (ID) category and a Pointer ID category. For each call address within the system which is a test call, a pointer to new software 121 is given, while for all call IDs containing a normal identification, the pointer is given to the old software 122. Fig. 5 graphically illustrates the method by which the system of the present invention is able to properly direct both ordinary, live traffic and test traffic to the proper version of software.” (Column 13, lines 18-27), wherein *Nilsson* teaches in the context of test and normal traffic software versions, however, this is the functionally equivalent to any different versions of software including Applicants’ old and new software versions. The updating of the pointer as taught by *Nilsson* directs the request to the appropriate version, thereby updating each version of the third set of instructions that is used by each device.

Moreover, as stated in the previous Office Action, Mailed August 9th, 2005, the fact that *Nilsson* teaches test software does not imply that *Nilsson* can’t perform a software upgrade or downgrade. In fact, *Nilsson* expressly discloses a method that enables the runtime inclusion of new software (Column 19, lines 55-62), with old software to be both effectively tested in real-time as well as to be smoothly and

transparently substituted (software replacement or upgrade) in a telecommunications network. Thereby, teaching old and new software in a telecommunications network.

(B) As to the argument that *Nilsson* does not discuss the issues present in a de-centralized environment...that occur as software is updated across a plurality of devices where one device may need to acquire and use software that resides on a different device (Page 6, Second Paragraph), Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

(C) As to the argument that *Nilsson* does not address the issues presented by updating software over a plurality of devices in a de-centralized environment, the Examiner respectfully disagrees. The Examiner agrees that *Nilsson* does not focus on several devices, however, that does not imply that *Nilsson* cannot be used in a de-centralized environment. In fact, *Nilsson* make several references to different processors as disclosed in section (A), client and server system (Column 14, lines 46-59) and (Column 19, lines 36-54), distributed objects and communications among different processors (de-centralized arrangement) as taught in section (A).

Moreover, the trader as disclosed does not involve the use of two software versions on the same device within the de-centralized environment as alleged (Page 6, third paragraph). In fact the trader, with published interfaces, would not require the versions to be in any specific place, because the pointer would direct the request to the appropriate location via the interface. In fact, if anything, this method implies distributed

use, because the trader points to the location of the software as opposed to having copies of each on each devices.

Nilsson further discloses "It would be of further benefit to the telecommunications industry to have the capability to direct a limited and specified portion of traffic through the new software or new portions thereof...A smooth transparent method of changing software during operation of the system that requires no special compilers would thus be highly desirable." In other words, the method discloses upgrading a system not a computer.

In response to Applicant's argument that *Nilsson* does not illustrate how one device may need to use the software that is contained on another device, the examiner would like to direct Applicant's attention to Figure 11, wherein *Nilsson* expressly discloses how one device may need to use the software that is contained on another device, in addition to the client/server, multiple processors and "de-centralized" teachings above, section (A). Thus, the rejection is maintained in light of the aforementioned issues.

(D) In response to Applicant's argument that *Nilsson* does not teach the creation of these claims subsets of devices from among the plurality of devices. Accordingly, the response as addressed above is applied to the current argument as all interfaces accessible to the linked procedure call are published to a trader function in the kernel, where each kernel has a trader function or third set of instructions which comprises an updated interface via the updated pointer to the created or upgraded object, which may be in a de-centralized arrangement (see figure 11), wherein (Column 19, lines 36-54),

distributed objects and communications among different processors (de-centralized arrangement) is disclosed, (i.e., see section (A)). Moreover, *Nilsson* discloses (Column 19, lines 55-62), the "...present invention enables the runtime inclusion or linking of new software with old software in a manner that enables software to be both effectively tested in real-time as well as to be smoothly and transparently substituted in a telecommunications network and switching system without disruption of the telecommunications traffic within the network" (emphasis added). Thus, the version of software may be available on the specific device or on another device within the subset in order for continued proper operation. Again, *Nilsson's* disclosure of client and servers can be interpreted as a subset of devices from among the plurality of devices, wherein the client system or systems is the subset of the client/server superset. In addition to the principle of the trader method disclosed by *Nilsson* which enables software to be located in any device. Therefore, *Nilsson* discloses subsets of devices from among the plurality of devices.

(E) In response to Applicants' arguments (Page 7, Third paragraph), the Examiner maintains the rejections at least for the reasons stated hereinabove, in sections (A), (C) and (D).

(F) In response to Applicants' argument (Page 8, second paragraph), that the claimed invention requires that during software replacement the third set of instructions in each of the plurality of devices in the first and second subsets is updated, the examiner agrees, and reasserts that *Nilsson* discloses this limitation. As disclosed above in sections (A), the trader function (third set of instructions) is updated via the

pointer, wherein each of the plurality of devices requiring a service, receives the correct version of software via the trader and interfaces, thereby, by updating the pointer the third set of instructions in each of the plurality of devices in the first and second subsets is updated.

(G) In regard to Applicant's remaining arguments on Pages 8-10, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. However, the remaining arguments pertaining to claim language are not persuasive, for at least the reasons as addressed/cited above in sections (A), (C) and (D).

(H) Accordingly, Independent claims 1, 6, 10 and 16 are not patentable over *Nilsson* for at least the reasons discussed above. Therefore, the examiner maintains and further clarifies the rejections of claims 1-21.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Romano whose telephone number is (571) 272-3872. The examiner can normally be reached on 8-5:30, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571) 272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2192

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJR

A handwritten signature in black ink, reading "Anthony Nguyen-Ba". The signature is written in a cursive, flowing style.

ANTHONY NGUYEN-BA
PRIMARY EXAMINER